UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,970	09/17/2003	Robert Bruce Nicholson	909B.0026.U1(US)	8604

29683   7590   08/28/2007
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ART UNIT	PAPER NUMBER
2113	

MAIL DATE	DELIVERY MODE
08/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/666,970	NICHOLSON ET AL.
	Examiner	Art Unit
	Christopher S. McCarthy	2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2007*.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,19-24,26-29,31-38 and 41-44* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17,19-24,26-29,31-38 and 41-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *9/17/03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☒ Other: *response to arguments*.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)

Office Action Summary

Part of Paper No./Mail Date 20070821

DETAILED ACTION

Claims 1-4, 6-12, 14-15, 17, 19-20, 22-23, 27-29, 31-38, 41-43 are rejected under 35

U.S.C. 102(b) as being anticipated by Nolet U.S. Patent 6,138,249, as cited in prior office action,

which was mailed on 3/27/07.

Claims 5, 13, 16, 21, 24, 26, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nolet in view of Ballard U.S. Patent Application Publication US2003/0088538, as cited in prior

office action, which was mailed on 3/27/07.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or, in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-12, 14-15, 17, 19-20, 22-23, 27-29, 31-38, 41-43 are rejected under 35

U.S.C. 102(b) as being anticipated by Nolet U.S. Patent 6,138,249.

As per claim 1, Nolet teaches a server for improving predictive failure attributes of

distributed devices (column 7, lines 55-58; column 8, line 57), comprising: a receiver for

receiving, via a network, failure analysis data from individual ones of a plurality of distributed

devices (column 7, lines 55-60); where each device of said plurality of distributed devices

comprises failure analysis software comprising a predictive failure analysis algorithm arranged

for collecting failure analysis data of said distributed device (column 8, lines 29-48, wherein

each device has a software agent that tests/monitors the device and transmits that information;

column 1, line 62 – column 2, line 8, wherein, the collected data at the distributed devices can be

used for predicting future problems in the manufacturing process); and a communications device

and arranged for transmitting said failure analysis data to said network (column 5, lines 18-29;

column 8, lines 33-36; column 6, lines 48-67) wherein said server is arranged for analyzing said

failure analysis data and for providing in response to the analysis an updated predictive failure

analysis algorithm to the plurality of distributed devices, wherein each of said plurality of

distributed devices is coupled to said network, wherein the updated predictive failure analysis

algorithm is provided to the plurality of distributed devices in the form of a first microcode that

is provided from the server to be used instead of a second microcode previously used by the

plurality of distributed devices, wherein the first microcode and the second microcode have

different tolerances of certain error events (column 8, lines 57-59, 40-48; column 18, lines 1-4,

wherein the central monitoring center gets the service requests from the devices and analyses the

data to see which monitoring/testing software the device is currently running, if the currently

used software is not the most up to date, the center transmits the most current updated software

to the devices for the future monitoring of the devices; column 13, line 59 – column 14, line 9).

As per claim 2, Nolet teaches the server of claim 1, wherein each of said plurality of

devices comprises an algorithm for managing an operation of a failure tolerant component and

wherein said updated predictive failure analysis algorithm provides for improved operation of

said failure tolerant component (column 13, line 65 – column 14, lines 1, 7-9; column 18, lines 1-4).

As per claim 3, Nolet teaches the server of claim 1, wherein said updated algorithm is transmitted to said each device via said network, wherein the network comprises the world wide web (column 17, lines 50-54, wherein, Nolet teaches the network to be on the Internet. *Microsoft Computer Dictionary* defines the Internet to be a worldwide collection of networks that includes the service of the world wide web (page 242)).

As per claim 4, Nolet teaches the server of claim 1, wherein said failure analysis data is used to improve at least one of design and manufacturing for future distributed devices (column 2, lines 3-8, wherein it is implicitly taught that these records would be used in future testing/manufacturing).

As per claim 6, Nolet teaches the server of claim 1 wherein each of said plurality of devices is coupled to said network via an intermediary software agent (column 8, lines 29-41).

As per claim 7, Nolet teaches the server of claim 6 wherein said intermediary software agent is installed on a local server (column 9, lines 57-59).

As per claim 8, Nolet teaches the server of claim 7, wherein said local server comprises a database arranged for storing said failure analysis data, said local server being arranged for periodically uploading said failure analysis data to said server (column 8, lines 5-9).

As per claim 9, Nolet teaches a device comprising: a predictive failure analysis algorithm arranged for collecting failure analysis data of said device (column 1, line 62 – column 2, line 8, wherein, the collected data at the distributed devices can be used for predicting future problems in the manufacturing process); and, a communications device coupled to said failure sensing

function and arranged for transmitting said failure analysis data to a remote server via a network, wherein said remote server is arranged for analyzing said failure analysis data received from said device and from other devices and for providing an updated predictive failure analysis algorithm to the device and the other devices, wherein the updated predictive failure analysis algorithm is provided to the plurality of distributed devices in the form of a first microcode that is provided from the server to be used instead of a second microcode previously used by the plurality of distributed devices, wherein the first microcode and the second microcode have different tolerances of certain error events (column 5, lines 18-29; column 33-36; column 6, lines 48-67; column 8, lines 57-64).

As per claim 10, Nolet teaches the device of claim 9 wherein said device includes an algorithm for managing the operation of a failure tolerant component of said device and wherein said updated predictive failure analysis algorithm provides improved operation of said failure tolerant component (column 13, line 65 – column 14, lines 1, 7-9; column 18, lines 1-4).

As per claim 11, Nolet teaches the device of claim 10 wherein said updated predicted failure analysis algorithm is transmitted from the remote server to said device via said network (column 17, lines 50-54).

As per claim 12, Nolet teaches the device of claim 9, wherein said failure analysis data is used to improve at least one of design and manufacturing for future devices (column 2, lines 3-8, wherein it is implicitly taught that these records would be used in future testing/manufacturing).

As per claim 14, Nolet teaches the device of claim 9 wherein said device is coupled to said network via an intermediary software agent (column 8, lines 29-41).

As per claim 15, Nolet teaches the device of claim 14 wherein said intermediary software agent is installed on a local server (column 9, lines 57-59).

As per claim 17, Nolet teaches a method for performing predictive data analysis using a central server (column 10, line 67 – column 11, line 10; column 19, lines 6-29), said method comprising: collecting failure analysis data in individual ones of a plurality of distributed devices in which each of the distributed devices uses a predictive failure analysis algorithm (column 7, lines 55-60; column 1, line 62 – column 2, line 8, wherein, the collected data at the distributed devices can be used for predicting future problems in the manufacturing process); receiving said failure analysis data at the central server from a network coupled to each device of said plurality of distributed devices (column 5, lines 18-29; column 8, lines 33-36; column 6, lines 48-67); analyzing said failure analysis data received from said each device at the central server; and in, response to the analysis, providing an updated prediction failure analysis algorithm from the central server to the distributed devices, wherein the updated predictive failure analysis algorithm is provided to the plurality of distributed devices in the form of a first microcode that is provided from the server to be used instead of a second microcode previously used by the plurality of distributed devices, wherein the first microcode and the second microcode have different tolerances of certain error events (column 8, lines 57-59, 40-48; column 18, lines 1-4, wherein the central monitoring center gets the service requests from the devices and analyses the data to see which monitoring/testing software the device is currently running, if the currently used software is not the most up to date, the center transmits the most current updated software to the devices for the future monitoring of the devices; column 13, line 59 – column 14, line 9).

As per claim 19, Nolet teaches the method of claim 17 wherein said updated predictive failure analysis algorithm is transmitted to said device via said network (column 17, lines 50-54).

As per claim 20, Nolet teaches the method of claim 17, wherein said updated predictive failure analysis algorithm is used to improve at least one of design and manufacturing for future devices (column 2, lines 3-8, wherein it is implicitly taught that these records would be used in future testing/manufacturing).

As per claim 22, Nolet teaches the method of claim 19 wherein said each device is coupled to said network via an intermediary software agent installed on a local server (column 8, lines 39-41; column 18, lines 1-4).

As per claim 23, Nolet teaches the method of claim 22 wherein said intermediary software agent is installed on a local server (column 9, lines 57-59).

As per claim 27, Nolet teaches a server as in claim 6, wherein said agent uses an interrogator (column 8, lines 40-46).

As per claim 28, Nolet teaches a server as in claim 6, wherein said agent uses a communications path other than that used for normal input and output (I/O) operations (column 11, lines 41-46).

As per claim 29, Nolet teaches a computer program comprising computer readable program code stored on a computer readable medium for performing failure analysis of a plurality of disk drives that comprise a part of at least one data storage system (column 8, line 65 – column 10, line 3), comprising first program code for collecting failure analysis data from individual ones of said disk drives and for transmitting said collected failure analysis data to a central server via a network and second program code, executed at said central server for

analyzing said failure analysis data and deriving an updated predictive failure analysis algorithm therefrom, where said updated predictive failure analysis algorithm is provided to the plurality of distributed devices in the form of a first microcode that is provided from the server to be used instead of a second microcode previously used by the plurality of distributed devices, wherein the first microcode and the second microcode have different tolerances of certain error events (column 7, lines 55-60; column 5, lines 18-29; column 8, lines 33-36, 57-64; column 6, lines 48-67; column 17, lines 50-54).

As per claim 31, Nolet teaches a computer program as in claim 29, where said updated predictive failure analysis algorithm comprises revised disk drive operating program code (column 13, line 65 – column 14, lines 1, 7-9).

As per claim 32, Nolet teaches a computer program as in claim 29, where said first program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is locally stored in said data storage system prior to being transmitted to said central server (column 5, lines 18-29; column 8, lines 33-36; column 6, lines 48-67).

As per claim 33, Nolet teaches a computer program as in claim 29, where said first program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is transmitted to said central server as it is collected (column 5, lines 18-29; column 8, lines 33-36; column 6, lines 48-67).

As per claim 34, Nolet teaches a computer program comprising computer readable program code stored on a computer readable medium for performing failure analysis of a plurality of disk drives that comprise a part of at least one data storage system, comprising first

program code, executed by a central server, for receiving, via a network, failure analysis data

from said at least one data storage system for analyzing said failure analysis data and for deriving

updated predictive failure analysis algorithm therefrom, where said updated predictive failure

analysis algorithm is provided to the plurality of distributed devices in the form of a first

microcode that is provided from the server to be used instead of a second microcode previously

used by the plurality of distributed devices, wherein the first microcode and the second

microcode have different tolerances of certain error events (column 7, lines 55-60; column 8,

lines 57-64; column 17, lines 50-54).

As per claim 35, Nolet teaches a computer program as in claim 34, further comprising

second program code, executed by a component of said at least one data storage system, for

collecting and transmitting said failure analysis data to said central server via said world wide

web (column 5, lines 18-29; column 8, lines 33-36; column 6, lines 48-67; column 17, lines 50-

54, wherein Nolet teaches the network to be on the Internet. *Microsoft Computer Dictionary*

defines the Internet to be a worldwide collection of networks that includes the service of the

world wide web (page 242)).

As per claim 36, Nolet teaches a computer program as in claim 34, where said updated

predictive failure analysis algorithm comprises revised disk drive operating program code

(column 13, line 65 – column 14, lines 1, 7-9; column 17, lines 50-54).

As per claim 37, Nolet teaches a computer program as in claim 35, where said second

program code is executed by a local server that comprises a part of said data storage system, and

where said collected failure analysis data is locally stored in said data storage system prior to

being transmitted to said central server (column 5, lines 18-29; column 8, lines 33-36; column 6, lines 48-67).

As per claim 38, Nolet teaches a computer program as in claim 35, where said second program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is transmitted to said central server as it is collected (column 5, lines 18-29; column 8, lines 33-36; column 6, lines 48-67).

As per claim 41, Nolet teaches a system for monitoring performance of a plurality of distributed devices via a network (column 7, lines 55-60), comprising: a network; a central server having a monitoring capability (column 7, lines 56-58, column 8, lines 57-59), the central server being coupled to the network; a plurality of distributed devices which are coupled to the network and which are monitored by the central server via the network (column 7, lines 55-60), each of the plurality of distributed devices having a failure data analysis capability provided by a predictive failure analysis algorithm of the corresponding distributed device (column 8, lines 39-48), each of the plurality of distributed devices providing predictive failure data to the central server via the network (column 8, lines 29-48, wherein each device has a software agent that tests/monitors the device and transmits that information; column 1, line 62 – column 2, line 8, wherein, the collected data at the distributed devices can be used for predicting future problems in the manufacturing process), wherein the central server modifies the predictive failure analysis algorithm in the form of a first microcode based on the predictive failure data to provide an updated predictive failure analysis algorithm in the form of a second microcode previously used y the plurality of distributed devices, wherein the first microcode and the second microcode have different tolerances of certain error events (column 8, lines 57-59, 40-48; column 18, lines 1-4,

wherein the central monitoring center gets the service requests from the devices and analyses the

data to see which monitoring/testing software the device is currently running, if the currently

used software is not the most up to date, the center transmits the most current updated software

to the devices for the future monitoring of the devices; column 13, line 59 – column 14, line 9).

As per claim 42, Nolet teaches a system as claimed in claim 41, wherein the updated

predictive failure analysis algorithm is provided to distributed devices being manufactured

device (column 8, lines 29-48, wherein each device has a software agent that tests/monitors the

device and transmits that information; column 1, line 62 – column 2, line 8, wherein, the

collected data at the distributed devices can be used for predicting future problems in the

manufacturing process).

As per claim 43, Nolet teaches a system as claimed in claim 41, wherein the updated

predictive failure analysis algorithm is provided to each of the plurality of distributed devices via

the network, wherein the distributed devices are data storage units (column 9, lines 31-40).

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

Claims 5, 13, 16, 21, 24, 26, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Nolet in view of Ballard U.S. Patent Application Publication US2003/0088538.

As per claims 5, Nolet teaches the server of claim 1. Nolet does not explicitly teach

wherein said failure information provides an indication of operating lifespan of said plurality of

distributed devices. Ballard does teach wherein said failure information provides an indication

of operating lifespan of said plurality of distributed devices (paragraph 0013). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to use the

failure information process of Ballard in the failure information process of Nolet. One of

ordinary skill in the art would have been motivated to use the failure information process of

Ballard in the failure information process of Nolet because Ballrd teaches the transmission of

remote device diagnostic information to a central location to assist the consumer (paragraphs

0010, 0013); and explicit desire of Nolet (column 5, lines 7-11).

As per claim 13, Nolet teaches the device of claim 9. Nolet does not explicitly teach

wherein said failure information provides an indication of operating lifespan of said device.

Ballard does teach wherein said failure information provides an indication of operating lifespan

of said plurality of distributed devices (paragraph 0013). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to use the failure information process

of Ballard in the failure information process of Nolet. One of ordinary skill in the art would have

been motivated to use the failure information process of Ballard in the failure information

process of Nolet because Ballard teaches the transmission of remote device diagnostic

information to a central location to assist the consumer (paragraphs 0010, 0013); an explicit

desire of Nolet (column 5, lines 7-11).

As per claim 16, Nolet teaches the device of claim 15 wherein said local server includes a database arranged for storing said failure analysis data from said device, said local server being arranged for periodically uploading said failure analysis data to a server (column 8, lines 5-9). Nolet does not explicitly teach wherein the server is a manufacturer's server. Ballard does teach wherein the server is a manufacturer's server (paragraph 0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the failure information process of Ballard in the failure information process of Nolet. One of ordinary skill in the art would have been motivated to use the failure information process of Ballard in the failure information process of Nolet because Ballard teaches the transmission of remote device diagnostic information to a central location to assist the consumer (paragraphs 0010, 0013); an explicit desire of Nolet (column 5, lines 7-11).

As per claim 21, Nolet teaches the method of claim 17. Nolet does not explicitly teach wherein said failure information provides an indication of operating lifespan of said device. Ballard does teach wherein said failure information provides an indication of operating lifespan of said plurality of distributed devices (paragraph 0013). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the failure information process of Ballard in the failure information process of Nolet. One of ordinary skill in the art would have been motivated to use the failure information process of Ballard in the failure information process of Nolet because Ballard teaches the transmission of remote device diagnostic information to a central location to assist the consumer (paragraphs 0010, 0013); an explicit desire of Nolet (column 5, lines 7-11).

As per claim 24, Nolet teaches he method of claim 23 wherein said local server includes a database arranged for storing said failure analysis data, said local server being arranged for periodically uploading said failure analysis data to a server (column 8, lines 5-9). Nolet does not explicitly teach wherein the server is a manufacturer's server. Ballard does teach wherein the server is a manufacturer's server (paragraph 0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the failure information process of Ballard in the failure information process of Nolet. One of ordinary skill in the art would have been motivated to use the failure information process of Ballard in the failure information process of Nolet because Ballard teaches the transmission of remote device diagnostic information to a central location to assist the consumer (paragraphs 0010, 0013); an explicit desire of Nolet (column 5, lines 7-11).

As per claim 26, Nolet teaches a server as in claim 1. Nolet does not teach wherein said network comprises a firewall, and where said failure analysis data is transmitted using a transmission protocol selected for being able to pass through said firewall. Ballard does teach wherein said network comprises a firewall, and where said failure analysis data is transmitted using a transmission protocol selected for being able to pass through said firewall.(paragraph 0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the failure information process of Ballard in the failure information process of Nolet. One of ordinary skill in the art would have been motivated to use the failure information process of Ballard in the failure information process of Nolet because Ballard teaches the transmission of remote device diagnostic information to a central location to assist the consumer (paragraphs 0010, 0013); an explicit desire of Nolet (column 5, lines 7-11).

As per claim 44, Nolet teaches a system as claim in claim 41. Nolet does not teach wherein the central server provides population statistics for distributed device ageing trends to a distributed device manufacturer for planning and budgeting considerations. Ballard does teach wherein the central server provides population statistics for distributed device ageing trends to a distributed device manufacturer for planning and budgeting considerations (paragraph 0013). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the failure information process of Ballard in the failure information process of Nolet. One of ordinary skill in the art would have been motivated to use the failure information process of Ballard in the failure information process of Nolet because Ballard teaches the transmission of remote device diagnostic information to a central location to assist the consumer (paragraphs 0010, 0013); an explicit desire of Nolet (column 5, lines 7-11).

Response to Arguments

3.   Applicant's arguments filed 6/20/07 have been fully considered but they are not persuasive.

With respect to applicant's arguments, the examiner will attempt to address each issue, but many arguments are repetitive, so prior arguments may be referred.

The applicant has argued that the inventive concept of a predictive failure analysis algorithm is within the disk firmware and is used to estimate the impending failure point and to generate alerts to users. While the applicant cites the specification as this definition, the definition as given in claim 1 is that the predictive failure analysis algorithm is arranged for collecting failure analysis data of the distributed device. As stated in prior actions, this is the

definition used by the examiner to limit the predictive failure analysis algorithm. It is analogous

to defining a computer, for instance, in the specification that performs a multitude of tasks, but in

the claim language it is defined as doing one function. In this case, the examiner would only

need to find the one function. Essentially, the applicant is urged to place the language of the

entire inventive concept in the claim language. Furthermore, the applicant again argues that

Nolet does not teach any predictive failure analysis. The examiner respectfully disagrees and

reiterates past arguments that Nolet does teach wherein the collected data is used in future

manufacturing processes to *adapt the process so that it can detect similar failures in the future.*

(emphasis added). The examiner reiterates that this teaches that the data collected is used to help

in the prediction of future failures, wherein the collected data is used to modify the process to

detect failures that were not predicted to that point, but are now predicted to be a future problem.

The applicant has also argued that Nolet does not teach a server being arranged for

analyzing this data. The examiner respectfully disagrees. The APC server/monitor updates itself

from data received from the agents; this is interpreted as the data that is received as being

analyzed to update the database along with the updated test files. As for the updated test files,

this argument was made in past arguments. Following is the argument from past office action

concerning this limitation:

"As for the updated algorithm, this argument along with the newly added language of

wherein the updated predictive failure analysis algorithm is provided to the plurality of

distributed devices in the form of a first microcode that is provided from the server to be used

instead of a second microcode previously used by the plurality of distributed devices, wherein

the first microcode and the second microcode have different tolerances of certain error events,

the examiner respectfully disagrees that this is also not taught in Nolet. As aforementioned in

prior rejections, Nolet teaches in column 12, lines 9-16, that an initial list of testing parameters is

used in the monitored device, but this list can be altered by a second list that expands the list or

changes it to include different testing parameters. The examiner interprets this teaching as

fulfilling the limitation of a first microcode being used over a second microcode in the monitored

device, as supplied from the central system. Nolet further teaches wherein this update occurs

based upon information returned by the server that responded to the broadcast request (column

12, lines 58-60(, that is, the updated microcode is based upon the request sent from the device,

and this request was originally sent from the device based upon a failure in the device (column 6,

lines 57-64). Therefore, putting all this together, the central system sends an updated list of

testing parameters, to be used instead of the old list, when a request is sent from the device when

a failure on the device has occurred. " The applicant has further argued that Nolet does not teach

wherein the two messages are dependent upon another; that is the failure message and the update

message. The examiner directs attention to column 8, lines 29-36, wherein Nolet teaches the

system to notice a missing test file update and sends a service request to the server. In turn, the

server updates the database accordingly. This is interpreted as updating the database in response

to a failure message.

Furthermore, the applicant argues that Nolet does not teach the updated microcode with a

different failure tolerance. The examiner again points to prior office action, which stated:

"As for the limitation of the micro-codes having different tolerances of error events, since

the update is produced upon the determination of a failure, it is implicit that the new microcode

be different than the initial, which would further imply different testing parameters; and,

therefore, detective of different error events." That is, looking at column 8, lines 29-31, a test file is not up to date, and in lines 40-42, those files are updated. Again the examiner contends that updated test files would implicitly have different failure tolerances or testing parameters or an update would not be needed.

With respect to claim 7, the applicant argues that Nolet does not teach a local server with the intermediary software. The examiner respectfully disagrees. The applicant has argued that Nolet teaching the agent to be acting as a server not the equivalent to a local server. The examiner does not agree, in that, a computer acting in the capacity of a server, is deemed a server. If the applicant would like to differentiate the claim language that the agent/device is separate from the local server, then that language should be present in the claim.

With respect to claim 5, the applicant argues that Ballard does not teach an indication of a lifespan of the device. The examiner respectfully disagrees. Ballard teaches, ¶ 0013, that the collected data includes information to predict the life expectancy. The prediction of life expectancy is deemed as fulfilling a mere indication of life expectancy. The failure data is taught in the reference of Nolet, the reference of Ballard is used to enhance what could be done with the collected data from a network device.

With respect to claim 16, the applicant has argued that the manufacturer server can not be a local server. The examiner does not see where that is relevant in the language. The local server, as taught in claim 15 under Nolet, only uploads to the manufacturer server, there is no language that the local server must be the manufacturer server.

With respect to claim 44, the applicant argues that Ballard does not teach the server to modify the predictive failure analysis algorithm. The examiner contends that this modification language is in claim 41 and was rejected under Nolet, not under Ballard.

To further expedite the prosecution, the applicant is urged to place definitive language in the claims as used in the Remarks, especially in relation the possible functionality of the predictive failure analysis algorithm. As mentioned above, the applicant argues the specification definitions of the algorithm, but the claim language only cites the lone function of collecting failure analysis data. The applicant is also urged to place in more detailed language of the local server, perhaps being separate from the device and the monitoring system.

In light of the above arguments, all applicable rejected claims stand.

Conclusion

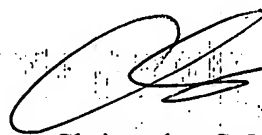4.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher S. McCarthy
Examiner
Art Unit 2113